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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/478,407	01/06/2000	TIMOTHY W. DYGERT	1364.1003CIP	1653
20306	7590	12/20/2004	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP			VINCENT, DAVID ROBERT	
300 S. WACKER DRIVE			ART UNIT	
32ND FLOOR			PAPER NUMBER	
CHICAGO, IL 60606			2661	

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/478,407

Applicant(s)

DYGERT, TIMOTHY W.

Examiner

David R Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,10,12,14,16 and 17 is/are rejected.
- 7) ☒ Claim(s) 2,4-9,11,13,15 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. An examiner's amendment to the record appears below.

Authorization for this examiner's amendment was given in a telephone interview with Brian Harris on 11/19/03.

The application has been amended as follows:

IN THE CLAIMS:

Claim 1, lines 3-5 have been replaced with

"a streaming device to detect which of the bit rates is used to encode each respective stream of the stored signals on the recordings and to output each stream as packet isochronous signals at the one of the bit rates for that respective stream."

Claim 5 lines 7-10, have been replaced with

"a real-time pump, coupled to said buffers and said control unit, to detect which of the bit rates is used to encode the stored signals on each of the respective multiple recordings and to output transport stream packets, each transport stream packet based on the stored signals from one of the multiple records;"

Claim 14, lines 5-7 (last three lines), have been replaced with

"detecting which of the bits rates is used to encode the stored signals for each respective stream; and

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outputting to the receiving devices each stream of stored signals as packet isochronous signals at the one of the bit rates for that respective stream."

Observation

The independent claims do not specify whether or not multiple streams of different encoded bit rates are combined together at the same time and maybe the applicant meant to make that more clear.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 10, 12, 14, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen (US 5,892,535; of record) combined with Haskell (US 5,668,841; of record; used as a dictionary), and Yanagihara (US 5,859,949).

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As shown in Figs. 1-2, 10, 12, 22-24, 27, 31, Allen discloses an apparatus (headend, servers, distribution network, Figs. 1-2, 10, 12, 27)

to output multiple streams (col. 5, lines 40-45; col. 49, lines 33-35; col. 51, lines 42-44)

of stored (col. 4, lines 43-46; col. 7, line 65-col. 8, line 2; media server cols. 11-12; col. 17, lines 27-30; col. 29, lines 15-19; col. 39, lines 31-42) signals,

each stream encoded (MPEG encoding, col. 17, lines 24-30; col. 24, lines 3-16; col. 39, lines 31-42),

isochronous (real time, col. 4, lines 43-50; national feed, col. 28, lines 39-59; avoiding jitter, col. 50, lines 19-20, cancels jitter, col. 50, line 27),

detecting one of the bit rates or which bit rate (detecting PCRs, col. 6, lines 3-9; col. 28, lines 39-59; using a microprocessor to detect the PCRs and the time between them, col. 49, line 64-col. 50, line 6), as specified in claims 1, 10, 14;

jitter less than two ms (avoiding jitter, col. 50, lines 19-20, cancels jitter, col. 50, line 27), as specified in claims 3, 12, and 16;

requesting specific recordings (using Video on Demand VOD, Fig. 5, 14-16, 34; col. 15; Figs. 1-2, 10, 12, 27), and playback

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device (col. 52, lines 6-59), as specified in claim 10; and a video pump (cols. 11-12 or 49-52),

However, although Allen discloses providing (which may imply the transmitting bit rate rather than the encoding bit rate) streams at various bit rates (col. 51, lines 42-44), Allen fails to particularly call for the plurality of bit rates, as specified in claims 1, 10, and 14; and the greater precision clock, as specified in claim 17.

As shown in Fig. Figs. 2, 4-5, Haskell teaches that detecting PCR signals is equivalent to detecting the encoded signal rates (col. 1, lines 25-31; col. 3, lines 52-56; col. 5, lines 10-19; col. 5, line 61-col. 6, line 9).

The term isochronous means equal (iso) time (chronous) and since the references teach removing jitter and using ATM the output signals are isochronous. The term isochronous is also defined as meaning without delay or real time.

As shown in Figs. 1-23, Yanagihara teaches plurality of streams (col. 1, lines 24-26; and lines 51-58), detecting the encoded rates (using the PCRs, col. 1, lines 61-67; col. 3, lines 34-44), plurality of data rates (e.g., col. 2, lines 44-64), stored signals (col. 3, lines 53-65; col. 7, lines 10-33), detecting the encoded rates and outputting each signal at its encoded rate (col. 4, lines 1-10), isochronous (real time, col.

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1, lines 23-30), and greater precision clock (Figs. 3 and 6 and their respective disclosure), as specified in claim 17.

It would have been obvious to not only use the PCRs but to use them so that the reproduced signals could be output at their respective encoding rates because that is the main idea behind using PCRs. Therefore it would have been obvious to combine the teachings of Yanagihara with Allen to show how MPEG systems operate and can produce a high quality signal that is identical to the original signal. Using the higher precision clock amounts to using a higher rate clock which Allen does not go into great detail about but Yanagihara shows actual figures to support this. It would have been obvious to combine the references also, because Allen discloses various rates (col. 51, lines 42-44).

3. Claims 2, 4-9, 11, 13, 15, 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record alone or in combination disclose or suggest the combination of limitations specified in claims 2, and 4-5, including bit rate within one bit per second of the encoded rate, as specified in claims 2, 11, and 15; details of the two


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stage counters, as specified in claim 5; and truncated periods, and dithering, as specified in claims 4, 13, and 18.

4. . Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 571 272 3080. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571 272 3078. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306 0377.


David R Vincent
Primary Examiner
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November 20, 2003